genus, rule 57 requires that he should strictly preserve the old specific names in his new genera; and when he has wantonly and knowingly neglected this rule, it may be right to correct him. But when a botanist has established what he believes to be a new species, and has therefore given it a new name, the changing this name after it has got into general circulation, because it has been discovered that some other botanist had previously published it in a wrong genus, is only adding a synonym without any advantage whatever, and is not even restoring an old name; for the specific adjective is not of itself the name of a plant. A generic name is sufficiently indicated by one substantive, for no two genera in the vegetable kingdom are allowed to have the same name; but for a species the combination of the substantive and the adjective is absolutely necessary, the two-worded specific name is one and indivisible; and the combining the substantive of one name with the adjective of another is not preserving either of them, but creates an absolutely new name, which ought not to stand unless the revious ones were vicious in themselves, or preoccupied, or referred to a wrong genus. It is probably from not perceiving the difference between making and changing a name that the practice objected to has been adopted by some of the first among recent botanists, such as Weddell, though under protest.

Thalictrum.—It is desirable that attention be given to our polygamo-dioecious species of this genus, namely, T. purpurascens and T. Cornuti of the Manual, and I shall be grateful for specimens throwing additional light on them. After carefully working over the material in the Gray, Torrey and Lapham herbaria, together with the numerous specimens in the duplicate collection of the late Charles Wright—now in the hands of Dr. Goodale—I should characterize these species as follows:

T. PURPURASCENS Linn.—Stem stout and tall, green or mostly purple, leafy: leaves ample, 3-4-ternate, the lowest petioled: leaflets as much as 2 in. long, short stalked, firm, the upper surface dark-green, mostly oblong or oblong-cuneate with three entire pointed lobes above: flowers nearly dioecious (very rarely with a few stamens when fertile), purplish, in a loose leafy panicle: stamens numerous, their long and spreading filaments widening to the linear-oblong cuspidate anthers, which are 2-3 mm. long: achenia densely clustered, 3 mm. long, ovoid-acuminate with mostly eight sharp longitudinal wings, those at the sutures most prominent, thin-walled, tapering into the slender persistent style. —Canada to Florida and Texas; west to Arizona, Montana and Saskatchewan.

Varies from glabrous or granular to pubescent or glandular-pubescent on the lower surface of the leaves, etc. When conspicuously glandular-pubescent it is *T. graveolens* Muhl., in Fl. Lancast. *Mss.*, which is the variety *ceriferum* Austin, of the Manual. Veiny and with strongly revolute margins it is *T. revolutum* DC.; with pubescent achenia it is *T. dasycarpum* Fisch. Mey. & Lall., which commonly approaches the next species in having anthers scarcely 2 mm. long and papillately-roughened filaments occasionally equalling the anthers in width and involute when dry. A form with thin leaves (scarcely thicker than in dioicum) and very long slender stigmas is *T. macrostigma* Torrey *ined.*, from Louisiana (*Hale*) and Indian Territory (*Palmer*); which appears to be partly connected with the type by shorter-styled Arizona specimens collected by *Rusby*.

T. POLYGAMUM Muhl. (*T. Cornuti* of the Manual).—Of the general appearance of the last but often less purple and with smaller leaves and leaflets: flowers most commonly polygamo-dioecious, more corymbosely clustered at the

ends of the nearly naked branches of the panicle, more conspicuous in the male plants from the shorter crowded erect stamens: filaments white, broader than the oval blunt (or rarely short mucronate) anthers and involute when dry, appearing then clavate and rugose: achenia mostly narrower and more stipitate.—New Brunswick to Florida and Louisiana; west to Ohio, but mostly confined to the Atlantic States.

Glabrous or pubescent, but not glandular. When conspicuously downy it is *T. pubescens* Nutt. The achenia are rarely pubescent.

So far as I have been able to observe, glandular and non-glandular trichomes never occur on the same plant, nor have I seen any glandular specimens with the characteristic stamens of T. polygamum, so that the presence of glands appears to be characteristic of T. purpurascens, so far as these two species are concerned. Where no stamens occur it is impossible to identify fertile plants with certainty unless this character can be utilized, and it must then be used only as a positive character, since glabrous or pubescent forms occur in both species. In T. purpurascens a variety can not conveniently be based on it, for several other species of the genus (e. g. T. sparsiflorum) include both glabrous and glandular forms, not separable by associated characters. No good reason exists for separating T. purpurascens into two species (revolutum and dasycarpum) as has been done by Lecoyer;* nor, in the opinion of Dr. Gray, is there sufficient doubt as to the plant intended by Linnæus to warrant the rejection of his name in this instance, though this is necessary in the case of T. polygamum.

Specimens occur both in the north and south which resemble T. dioicum in having very thin glabrous (rarely sparingly pubescent) pale leaflets rounded and with 7 to 9 round lobes at the apex, but with the fruit, as in these species, *i. e.*, thin-walled, stipitate, 2-edged and wing-nerved (not subsessile, thick-walled, terete and deeply and evenly grooved). It is doubtful whether these forms should not be regarded as hybrids, and cases of the simultaneous flowering of T. dioicum and either of the late species should be noted.—Wm. Trelease.

The Brothers Tulasne.—It is but a few months since the botanical journals announced the death of Charles Tulasne at Hyeres in the south of France, on August 21, 1884, and we are now called to mourn the death of his elder brother, Louis René Tulasne, who died at Hyeres on December 22, 1885. In their lives and botanical work the two brothers were so intimately associated that botanists have almost come to use the name Tulasne as representing a single person. They were so modest and reticent with regard to themselves that few details of their lives could be learned even by their associates. The older brother, Louis René, was born at Azay-le-Rideau, Indre-et-Loire, September 12, 1815, and studied law at Paris. His first botanical work was in connection with Auguste St. Hilaire in the preparation of his flora of Brazil. In 1842 he was appointed aide-naturaliste at the museum of the Jardin des Plantes, and, in 1854, he was elected to the Academy as the successor of Adrien de Jussieu. About 1864 his health failed and he was obliged to retire from active service at the museum. His brother Charles was born at Langeais, Indre-et-Loire,

* Monogr. du genre Thalictrum, Gand. 1885.